## OCCASIONAL PAPERS OF THE

# ROYAL ONTARIO MUSEUM OF ZOOLOGY 

Toronto, Ontario.

The University of Toronto Press

## TWO NEW SPECIES OF ONTARIO SPIDERS

By T. B. Kurata

Ozyptila gertschi, sp. nov.
This description of a new species of thomisid spider is based upon three males collected at Fort Albany, James Bay, Ontario, by Dr. F. A. Urquhart of the Royal Ontario Museum of Zoology in June, 1942, in the course of field work on behalf of the Museum. The author wishes to thank Miss Elizabeth B. Bryant of the Museum of Comparative Zoology for the loan of material. This species is dedicated to Dr. W. J. Gertsch of the American Museum of Natural History, who not only confirmed my opinion as to the novelty of the species in hand but also has been most generous to me in the past.

The following description applies to the holotype, except in the case of the carapace where notes on two other specimens have been added. Holotype-male, total length, 5.20 mm .

Carapace dark brown, with paler median band. The median longitudinal pale band of the carapace in the type individual originates anteriorly just behind the posterior median eyes and widens until it meets the cephalic groove somewhat beyond the posterior lateral eyes where its width is a little less than the distance between the posterior lateral eyes. Posteriorly the width remains almost constant as far as the highest point of the carapace, after which it increases until it is equal to half the width of the carapace at the posterior end. In this specimen all eyes are surrounded by dark brown like that of the carapace. The anterior portion of the band is invaded by pale brown, ending before the highest point of the carapace. On this area there are several paler maculations, of which the largest two are found just behind the posterior median eyes. In the anterior two-thirds of this area the sides are nearly parallel and behind this they converge to a point. Back of the brown area the band is almost white and V-shaped, extending just beyond the highest point. Behind this it is pale brown. The dark sides of the carapace which are of the same tone of brown as the eye region have the
maculations arranged in the form of a lateral crescent. There are some dark radiations running from the white $V$-area toward each crescent.

In the second male the median longitudinal band extends anteriorly between the posterior lateral and posterior median eyes and forward to the anterior median where its width becomes the same as the distance between the anterior medians. This light area is covered by the brown blotches. In the only other individual the light area is almost the same as in the second individual but is covered by larger, more numerous brown blotches.

Abdomen. Length, 1.73 mm . The colour of the dorsum is the same as that of the venter and is a little paler than the sides of the carapace. On the dorsum there are median and lateral series of pale maculations which extend from the base to almost three-fourths of the length of the abdomen. The lateral maculations appear to the unaided eye as white bands. The median band is whitish at the base, beyond which it consists of a broken series of pale brown maculations. On either side of the posterior half of this band there are four transverse rows of pale spots of various sizes. Behind them are four transverse bars each enclosing maculations of varied sizes but decreasing posteriorly. On the venter and sides are broken lines. In the latter case they are diagonal in position and eight or nine in number.

Carapace. Length, 1.55 mm .; width, 1.40 mm . Clypeal margin with six long spines and, in the centre, midway between the clypeal margin and the anterior median eyes, there is a spine. On the carapace there are two long spines, one on each inner face just behind the anterior median eyes, one behind and one on the outside of the anterior lateral, one behind the posterior lateral, still one more almost halfway between the posterior lateral and posterior median eye. The rest of the carapace is clothed sparsely with very weak spines. It is highest between II and III coxæ. Its width at the front is one half of its maximum width.

Eyes. Eyes of the first row are recurved, medians being nearer the larger laterals than to each other. Eyes of the second row are also recurved. The small median eyes are nearer to each other ( $6.0 / 9.0$ ) than to the larger laterals. Median ocular quadrangle longer than wide. The posterior median is slightly smaller than the anterior, being farther apart than in front. Clypeus vertical, slightly higher than one half the length of the median ocular quadrangle, and slightly less than twice the diameter of the anterior median eye.

Legs. Almost straw yellow, femora I and II darker. The femora of all four pairs of legs are flecked in front, also the tibix of III and IV. The second pair of legs is the longest, the fourth pair little longer than the third (II, I, IV, III). On the first femur two prolateral spines occur. On legs II and III there is a spine on the dorsum; IV has a long slender spine. The tibire I and II have two pairs of spines below, the metatarsi I and II have three pairs of spines below.

|  | Femur | Patella | Tibia | Metatarsus | Tarsus | Total length |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I..... | 1.20 | 0.65 | 0.95 | 0.82 | 0.52 | 4.14 |
| III.... | 1.30 | 0.65 | 1.00 | 0.82 | 0.55 | 4.32 |
| III.... | 0.95 | 0.50 | 0.65 | 0.47 | 0.46 | 3.03 |
| IV.... | 1.00 | 0.49 | 0.68 | 0.54 | 0.48 | 3.19 |

The femur of the male palpus is about as long as the patella and tibia together. The patella is nearly twice as long as the tibia. The palpal organ is figured in the plate.

The nearest relative of Ozyptila gertschi seems to be O. conspurcata Thorell. The coloration of the latter is in general somewhat darker than that of the new species. The crescent-shaped maculation of the carapace of this species is much more pronounced than that of $O$. conspurcata. The basal band or maculation on the dorsum of the abdomen in $O$. gertsch $i$ is also very conspicuous but in conspurcata it is hardly noticeable.

The male holotype No. 7072, R.O.M.Z. One paratype has been deposited in the American Museum of Natural History and the other is in the Museum of Comparative Zoology, Harvard College.

## Pirata Bryantæ, sp. nov.

A single female of a new species of wolf spider was collected in June, 1938, by Mr. Morley Neal of the Department of Zoology, University of Toronto, in the course of field work for the Royal Ontario Museum of Zoology at Favourable Lake, Lat. $53^{\circ}$ N., $94^{\circ}$ W., Patricia District, Ontario. It is dedicated to Miss Elizabeth B. Bryant of the Museum of Comparative Zoology in appreciation of her kind assistance to the writer since he commenced a study of spiders. I wish to thank Dr. W. J. Gertsch of the American Museum of Natural History for confirming my opinion as to the distinctness of the present species.

Female, total length, 5.20 mm ., carapace, 2.40 mm ., long, 1.55 mm . wide.

Carapace sparsely clothed with gray hairs, the dark eye region bearing a few long, weak spines. Integument of carapace dark yellowish brown with four pairs of darker wedge-shaped radiations extending from the dorsal groove toward the thoracic margin. A narrow yellowish line originates just behind the dorsal groove and ends at the posterior margin of the thorax. Sternum uniformly black. Mouth-parts, gray.

Abdomen. Dorsum somewhat paler than carapace, with a brownish hastate mark on its anterior half and six pairs of very small white spots, of which two pairs are situated on the anterior third of the dorsum, the remaining four pairs on the posterior third. Sides of abdomen of same colour as dorsum, venter a little paler.

Clypeus is as high as diameter of the anterior lateral eye. Lower margin of chelicera armed with three subequal teeth. Sternum longer than broad ( $6 / 5$ ).

Eyes. The first row of eyes is slightly procurved and narrower than second ( $17 / 22$ ); the larger medians are separated by the diameter of one of them; each lateral is closer to the adjacent median than the medians are to each other $(1 / 2 / 1)$. The eyes of the second row are narrower than those of third $(22 / 30)$ separated from each other by a little more than half a diameter $(6 / 9)$ and less than a diameter from the third row $(75 / 90)$. The third row is separated by little less than three diameters $(7 / 18 / 7)$. The dorsal quadrangle is broader than long (18/8), narrower in front than behind.

Legs. The tibix I, II, IV have two pairs of spines below (2, 2), and III has two $(1,1)$ below on retro-lateral or outside only. All four femora have 3 spines on dorsum.

|  | Femur | Patella | Tibia | Metatarsus | Tarsus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. | 1.85 | 0.80 | 1.50 | 1.38 | 0.85 | 6.36 |
| II. | 1.64 | 0.75 | 1.33 | 1.35 | 0.78 | 5.85 |
| III. | 1.70 | 0.75 | 1.40 | 1.85 | 0.85 | 6.55 |
| IV. | 2.30 | 0.87 | 2.05 | 1.98 | 1.07 | 8.27 |

Markings of Appendages. Although the markings of the palpus resemble those of legs I and II which are alike, they differ from those of legs III and IV which are also alike.

Epigynum nearly three times wider than long, its transverse axis being almost equal to the width of labium. In shape it somewhat resembles that of $P$. montana Emerton. In the latter species, however, the openings of the spermathecæ are situated farther forward and are closer together.

Pirata bryantx, owing to its dark brown coloration, resembles superficially spiders of the genus Pardosa. The new species, however, may be readily distinguished from species of the latter genus by its much fewer hairs and, of course, by the differently shaped epigynum. Of the genus Pirata, it most closely resembles P. montanus Emerton, owing to the absence of the submarginal light band. P. bryanta, however, differs noticeably in being darker and in lacking the light median band and Y -shaped marking of the carapace.

The new species may be easily separated from any spiders known to the writer by the following points: (1) general dark coloration, (2) lack of median light area and of the Y-shaped marking, (3) the presence of dark rays on the thorax and (4) the markings on the legs.


Ozyptila gertschi: 1, 2, left palpus; 5, front view of head, showing position of eyes and spines; 6 , dorsal markings; $O$. conspurcata: 3,4 , left palpus.


Pirata bryanta: 1, palpus; 2, leg $1 ; 3$, leg III; 4, epigynum.

